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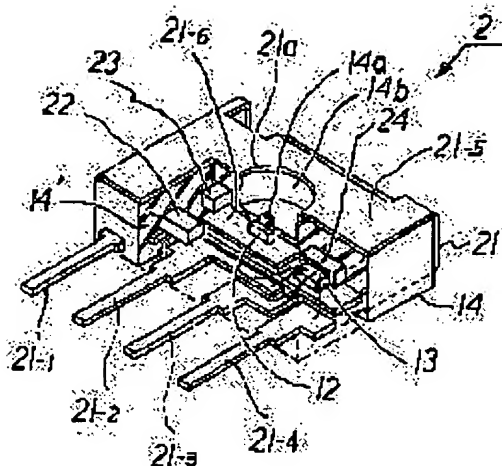
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(54) **LIGHT ELEMENT ASSEMBLY AND MANUFACTURE THEREOF**

(57)Abstract:

PURPOSE: To suppress the noise of a light element assembly and ensure its shield and further improve its productivity, by covering the surface of its IC chip with an opaque resin, and by covering the whole periphery of the light element assembly sealed thereafter with a transparent resin wherefrom its light-signal inputting/outputting parts are excluded with a shielding piece connected electrically with a lead-frame grounding external connection terminal.

CONSTITUTION: In a light element assembly 2, the surface of an IC chip 13 is covered with an opaque resin 24. Then, the whole periphery of the device mounting region of the light element assembly 2 wherefrom external connective terminal regions are excluded is so sealed by a transparent resin 14' that a recessed hole 14b having a convex semi-spherical lens 14a in its central part whose size is the same as an optical- fiber inserting part is formed in the opposite position to a light receiving element 12. Thereby, a rectangular block-form transparent resin body 14 is formed. Thereafter, a shielding piece 21-5 of a lead frame 21 is so bent that the surface of the transparent resin body 14 is contacted therewith and is covered therewith. In this manner, the light element assembly 2 is configured. Thereby, even when a part of the incident light signal of the light receiving element 12 is projected on the IC chip 13 provided in close proximity to it, the light signal is cut off by the opaque resin 24, and any noise is suppressed.